SUMMARY OF THE PHASE 1A ARCHAEOLOGICAL SURVEY

The following discussion presents a summary of the research design, methods, and results of a Phase IA Archaeological Survey of the S.R. 26 Improvements project area, which is located in Baltimore Hundred, Sussex County, Delaware (***Figure C-1 in Appendix C***). As discussed earlier in this report, the project area is located in the Atlantic/Coastal Bay physiographic zone of Delaware's Low Coastal Plain (***Figure C-2 in Appendix C***). Generally, soils along S.R. 26 consist of the excessively well-drained sands and sandy loams of the Evesboro-Rumford association (USDA and DAES 1974) (***Figure C-3 in Appendix C***).

The first step of the survey entailed identification of an anticipated APE for the project. Pursuant to Federal Regulations for the "Protection of Historic Properties, 36CFR Part 800.2, the APE is defined as the "geographical area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist". For the purposes of the archaeological survey, the APE was determined to consist of lands within the Proposed Right-of-Way where proposed work would result in disturbance of existing lands surfaces.

Research Design and Methods

The Phase IA Archaeological Assessment was performed with the intent to achieve several goals. Specifically, these goals were:

- to identify any previously documented archaeological sites that may be affected by the proposed construction.

- to provide a comprehensive preliminary assessment of the archaeological sensitivity of the overall project APE.

- to identify areas of archaeological sensitivity within the project APE.

- to develop and present appropriate subsurface testing strategies that can be used to ascertain the presence or absence of any significant archaeological deposits within the identified archaeological target areas.

To achieve these goals, several measures were undertaken. The Phase IA Survey included documentary research, generation of an inventory of known/previously documented archaeological sites, a field inspection of the project APE, relevant data analysis, and report preparation.

Results of Archaeological Background Research

Prior to field inspection of the project APE, a review of available documentation was conducted in order to identify any previously recorded archaeological sites within the vicinity of the project area and to acquire an understanding of the past land use of the project APE. In addition to in-house materials, primary reference materials consulted were files housed at the Delaware Department of Transportation, the Delaware State Historic Preservation Office, the Delaware Public Archives, the University of Delaware, as well as other historical and educational institutions. Materials subjected to review included relevant project documentation, "As-Built" plans, environmental and historic mapping, Sussex County road papers, technical journals, cultural resource management surveys, as well as pertinent publications regarding the Native American history, history, ethnohistory, and geography of the area. Research efforts also included a review of electronic media (e.g., internet resources) and consultation with knowledgeable individuals.

Although various cultural resource surveys have been performed in the general area (e.g., Custer, Catts and Hawley 1992; Kellogg, Catts, and Woods 1994; Wholey 2000; Mulcahahey, Siders, et al 1990; Custer and Mellin 1987, 1990, 1991a, 1991b; LBA 1999), to date, no archaeological sites have been identified in the project APE. The closest known site, 7S-K-101 is situated approximately 170 feet south of project APE (***Figure C-4***). Located in Ocean View on the north side of Central Avenue, 7S-K-101 has been identified as the remains of a small Native American occupation site (Kellogg, Catts, and Woods 1994).

Nonetheless, the findings of the background research warrant discussion as they provide considerable insight into past Native American habitation of the area and the historic development of the S.R. 26 corridor.

Native American Habitation of the Region. Although no Native American sites have been recorded within the project APE, such sites have been identified with considerable frequency throughout this portion of the state. Small clusters of Native American sites have been documented between Blackwater and White Creeks. Several of the known sites along White Creek (e.g., 7S-K-29, 7S-K-54, 7S-K-101, and 7S-K-103) and Clarksville Brook (e.g., 7S-K-75, 7S-K-76, and 7S-K-77), are situated within one-half mile (north) of the S.R. 26 project APE (***Figure C-4***).

The occurrence of Native American archaeological sites within the general area is not unusual. Located in the Low Coastal Plain, the project area falls in the Atlantic Coastal/Bay physiographic zone of Delaware and Native American sites from all contexts have been identified throughout this physiographic zone (Custer and Mellin 1987, 1990, 1991a, 1991b; Custer, Doms, Davis, and Trivelli 1985; Custer 1987, 1989). Zone-wide studies by Custer and Mellin (1987, 1990, 1991a, 1991b) have encountered notably high concentrations of Native American sites along Rehoboth and Indian River Bays and their associated waterways.

In the Atlantic Coastal/Bay physiographic zone, Native American archaeological sites have been found in a variety of riverine and coastal settings. As would be expected, certain types of environmental settings can be expected to contain certain types of sites. Larger sites, such as base camps, are often found on major terraces of drainages, at well-drained headlands adjacent to swamps and marshes, near or at the confluences of low order tributaries, as well as at sheltered coves and other assorted coastal settings. While smaller procurement/processing sites are also often found in the aforementioned environments, such sites have also been found in all types of settings that range from alluvial fans associated with swamps and bogs to cobble beds (Custer 1986; 1989, 1994).

Interestingly, by comparison, fewer sites have been identified in the Assawoman Bay are than around Rehoboth and Indian River Bays (Custer and Mellin 1991b). Reasons for the comparatively low site frequency in the Assawoman Bay area are difficult to discern. Compared to Indian River and Rehoboth Bays, the Assawoman Bay has a lower number of associated high order drainages. As such, it has been suggested that it is quite possible that past Native American habitation may have been less in the Assawoman Bay area than in other watersheds of the Atlantic/Bay Coastal zone (Custer and Mellin 1991a, 1991b). Low site densities have also been suggested to be a reflection of the extent of site loss/destruction that has resulted from modern development around Assawoman Bay (Custer and Mellin 1991a, 1991b).

Given the location of the project APE, the environmental setting of the project APE, and the discovery of several Native American archaeological sites in the general region, it is unsurprising that the project APE crosses several high and medium probability areas that have been identified by regional and statewide predictive models (Custer 1990; Custer, Catts, and Hawley 1994) (***Figure C-4 in Appendix C***).

Historic Development of S.R. 26. Documentary records indicate that the current course of S.R. 26 follows the general path of one of the early public roads of southeastern Sussex County. Although infrequently depicted, various late eighteenth and early nineteenth century maps depict a road that ran eastward from Dagsboro to the coastline (***Figures C-5 and C-6 in Appendix C***). One of the more noteworthy and earlier references to this road is found in a 1795 road return for the construction of a new road beginning just east of Blackwater Branch to "the road called the Sea Side Road leaving from Dagsborough to the seaboard" (Sussex County Road Return, April 25, 1795) (***Figure C-7 in Appendix C***). In addition to depicting "Sea Side Road", the accompanying return also shows a meetinghouse at the northeast corner of where Blackwater Branch crosses "Sea Side Road". This meetinghouse is now known as Blackwater Presbyterian Church. Based on comparisons with modern mapping, it is believed that the aforementioned road return was filed for a new road that would eventually became present-day Road 346, which is located just west of the S.R. 26 project APE. "Sea Side Road" is also noted in a 1787 road petition (Sussex County Road papers, June 7, 1787) and its associated road return (Sussex County Road papers, June 14, 1787).

By the middle of the nineteenth century S.R. 26 had developed into a main east-west transportation route of southern Sussex County, Blackwater (present-day Clarksville) was well-established as a crossroad town, and various farmsteads could be found along S.R. 26 between Dagsboro and Cedar Neck (***Figure C-8 in Appendix C***). The projected locations of structures depicted on Beers (1868) have been superimposed on a modern mapping in (***Figure C-4 in Appendix C***).

It is also around this time that the community of Hall's Store (present-day Ocean View) began to emerge as a small commercial center (www.oceanviewde.com/history.html). In 1888, the U.S. Army Corps of Engineers began construction of the Assawoman Canal. Three years later, in 1891, the three-mile long canal connecting Indian River Bay via White Creek with Little Assawoman Bay was constructed (Kellogg, Catts, and Woods 1999).

Although the nineteenth century also marks the rise of commercial and service industries associated with shipping industries of the region, most of the project APE continued to operate under an agrarian-based economy. Results of eighteenth and nineteenth century land improvements such as ditching can still be seen on modern landscape (***Figure C-1 and C-3 in Appendix C***).

Overall, the course and path of S.R. 26/Atlantic Avenue has deviated little from "Sea Side Road"; however, review of "As-Built" plans and other historic mapping has identified several notable roadway modifications within the project APE. During the second quarter of the twentieth century, S.R. 26/Atlantic Avenue in Ocean View was extended straight across to Woodland Avenue. By 1944, the roadway extended to Woodland Avenue (***Figure C-9 in Appendix C***). In 1938, the intersection at S.R. 26 and Omar Road was channelized to provide free-flowing turn operations (***Figure C-10 in Appendix C***). In 1963, Powell Farm Road was laid at the S.R. 26/Omar intersection (***Figure C-10 in Appendix C***).

Discussion of the Archaeological Sensitivity of the Project APE

After the background research, a field inspection was conducted to examine the current landscape and built environment of the project APE. Observations made during the field inspection were then used in conjunction with the results of the background research, consultation with project individuals, and discussions held during a project planning field view (June 12, 2001), to assess the archaeological sensitivity of the project APE.

Regional Archaeological Sensitivity. Results of the background research clearly imply that from a regional perspective, the project APE falls within a portion of southeastern Sussex County that has considerable potential to contain archaeological sites.

The geographic location of the project APE and the environmental setting within which it falls are generally considered to be high probability zones for containing a diversity of Native American archaeological sites. In fact, many sites have been discovered along several of the drainages that pass through the project APE. Identified site types range from small procurement/processing locales to base camp sites. The high frequency of

Native American archaeological sites in the general region is not unusual. The environs of the Indian River Bay area would have supported a diversity of floral and faunal resources and as such, would have been considered a favorable settlement locale by past human groups. Based on current models of archaeological research, Native American site type expectancies for the general region may range from small procurement/processing locales to base camp sites. Of the temporal contexts developed for Delaware, the general vicinity of the project area is most apt to contain sites of the Woodland I and Woodland II Periods (Custer 1986, 1989, 1994).

The project APE also falls within a high probability zone for historic archaeological sites. The historic period of Baltimore Hundred begins quite early. As discussed earlier, the S.R. 26 corridor is one of the earlier transportation routes of the Hundred and dates to the late eighteenth century. By the middle of the nineteenth century, the corridor was well-established as a major transportation route between Dagsboro and the coast. Throughout the general area, various standing structures and archaeological sites associated with Baltimore Hundred's historic past have been identified. A few of these sites, such as Blackwater Presbyterian Church (ca. 1700) and Spring Banke (ca. 1770), are found in the immediate vicinity of the project APE. Various regional cultural resource planning studies (e.g., De Cunzo and Garcia 1994; De Cunzo and Catts 1990; Custer, Catts and Hawley 1992; Mulchahey et al. 1990) have recognized the general S.R. 26 corridor as a high probability zone for containing sites associated with the historic development of Baltimore Hundred. Based on the historic development of the area, the general region is most apt to yield sites relevant to the Agriculture and Rural Life (1770-1940) of Sussex County (De Cunzo and Garcia 1993). Within this context, the general area is most likely to contain sites within two of the established time periods of regional history: Industrial and Capitalization (1830-1880) and Urbanization and Suburbanization (1880-1940) (De Cunzo and Catts 1990). Site expectancy types for this portion of Baltimore Hundred are domestic sites such as farmsteads; community sites such as churches and schools, as well as small commercial sites such as mills, shops, inns, and taverns which would have serviced local inhabitants.

Discussion of Archaeological Sensitivity of the Project APE. Although the general region within which the project APE is considered to have a high probability for containing archaeological resources, ascertaining the overall archaeological sensitivity of the project APE *itself* presents an interesting challenge.

Per the current design scheme, it is anticipated that aside from a few exceptions, such as around intersections and at the locations of the proposed drainage basins, most of the proposed work will be conducted within about fifteen feet from the edge of existing pavement. In general, along S.R. 26, the project APE runs along the edges of front lawn/yard areas of various residential, community, and commercial properties that flank the roadway.

During the field inspection, it soon became quite apparent that given the type of proposed work, subsurface disturbance of intact (i.e. undisturbed) lands will be quite limited. Most of the unpaved lands encompassed by the project APE has experienced considerable modern subsurface disturbance associated with various activities. Past disturbances

include the installation of subsurface utility lines, the placement of sidewalks, previous roadway construction/maintenance, commercial/residential development, drainage management activities, paving, and major landscaping. Given the severity and extent of past disturbance, most of the unpaved surfaces within the project APE are considered to have a low probability for containing any intact archaeological resources. Therefore, for the purposes of the archaeological study, it was deemed prudent to focus study efforts on targeting any areas within the project's anticipated APE that may warrant subsurface testing. Ranking and selection of archaeological target areas was based on combination of several criteria. Preferably, optimal target areas of the project APE are those:

- where the extent of past subsurface disturbance appears to have been minimal (e.g., limited to plowing)

- that, per current models of research and/or historic records, are considered to be high probability areas for containing archaeological materials

- that are apt to contain intact archaeological deposits

During the field inspection, careful attention was to given to targeting locations at drainages, properties with historic standing structures, estimated locations of structures depicted on historic mapping that have since been razed, cemeteries that abut Route 26, and large areas of seemingly intact land that will be subjected to impact (e.g., construction of drainage basins). For properties with historic standing structures, concerted efforts were also made to determine if the project APE could contain subsurface remains of no longer extant structural components of these properties such as former outbuildings, razed additions (e.g., porches), past landscaping features (e.g., fence lines and gardens), or other features (e.g., wells).

A total of twenty-two target locations within the project APE have been identified. A list of the identified target areas and recommended basic testing strategies for each area are presented in **Table 2**. Cumulatively, these target areas comprise approximately 22 percent of the total linear feet of the project APE. It is important to note that only lands *within the bounds* of the project APE were addressed. While much of the project APE does indeed abut lands that can be considered archaeologically interesting, often, the portion of the project APE that crosses such areas was discovered to be severely disturbed. Common examples include narrow segments of the project APE that run along the roadside edges of drainages and historic properties. While it is possible that these areas may have once contained archaeological deposits, it is highly likely that modern earthmoving activities have since destroyed any such deposits.

For planning purposes, a basic testing strategy for each of the identified target areas was also developed. As implementation will be contingent on project coordination, it is recognized that depending on changes to the design scheme, some areas may not need to be tested or a different type of testing strategy may be more applicable. Pending consultation, properties that will be subjected to total acquisition may also require testing.

One of the key issues recognized during the June 2001 field view involves three cemeteries that flank S.R. 26. Specifically, these cemeteries are the St. George's Cemetery at the S.R. 26/Powell Farm Road intersection, the Messick Cemetery on the north side of S.R. 26 between Sta. 79 and Sta. 81, and the Mariners Bethel Methodist Cemetery at the S.R. 26/Central Avenue intersection. As is apparent in ***Figure C-10 (Appendix C)***, the peripheries of these cemeteries have been encroached upon by past road widening. Currently, tombstones are present within ten feet from the edge of pavement at the St. Georges and Mariners Bethel Methodist cemeteries. The Messick Cemetery, the remains of a small family plot, is also believed to contain unmarked graves. Given the proximity of these cemeteries to the roadway, subsurface examination is highly recommended to ensure that no unmarked graves or human remains are contained within the project APE.

Table 2
Archaeological Target Areas and Recommended Testing Strategy

Station	Side of S.R. 26	Proposed Testing Strategy	Approx. # of test pits	Potential Resource
STA. 13-17 (Omar intersection)	North	STPs every 50' for 400' east of drainage	8	Native American
STA. 13-16 (Omar intersection)	South and along Powell Farm and Omar Roads.	mechanical stripping and monitoring near cemetery	N/A	Historic: Unmarked Graves Past roadwork (1938, 1963) may have truncated graves along Roadside edge of St. Georges Cemetery (see ***Figure C-10***)
STA. 19-22	North	STPs every 50' for 300' east of drainage	6	Native American
STA. 19-22	South	STPs every 50 for 300' both sides of drainage	12	Native American
STA. 60.5-63	North	STPs every 50'	5	Historic May contain deposits associated with agricultural complex.
STA. 65.5-70	North	STPs every 100'	5	Native American
STA. 79-81	North	mechanical stripping and monitoring near cemetery	N/A	Historic: Unmarked Graves Past roadwork (1963) may have truncated graves along roadside edge of Messick Cemetery (see ***Figure C-10***)
STA. 112.5-116.5	South	STPs every 50' for 500' west of drainage	10	Native American Small wetland between STA 113-114 may be remnants of a bay/basin type feature.
Windmill Road	West side of Windmill Rd.	STPs every 50' between 200-300' south of S.R. 26/Windmill Rd. intersection	4	Historic May contain deposits associated with a no long extant house that is depicted on Beers (1868).
Windmill Road	East side of Windmill Rd.	STPs every 50' between 200'-400' south of S.R. 26/Windmill Rd. intersection	5	Native American
STA. 129-130	North	STPs every 50' for 100' west of drainage (in small wooded lot)	3	Native American
STA. 141-143	South	STPs every 50' for 100' west of drainage and for 100' east of drainage	6	Native American
STA. 141-142	North	STPs every 50' for 100' west of drainage	3	Native American
STA. 142-144	North (proposed drainage basin)	STPs at 50' at intervals in footprint of 70' x 130' drainage basin	10	Native American
STA. 159-160	North (proposed relocation of access)	STPs at 50' intervals in footprint of 50' x 80' area	4	Native American
STA. 160-161.5	South (proposed drainage basin)	STPs at 50' intervals in footprint of 70' x 200' drainage basin	11	Native American (falls along the edge of a previously delineated high probability zone)
STA. 160-162.5	North	STPs every 50' for 100' east of drainage	5	Native American (falls within previously delineated high probability zone)
STA. 161.5-165.5	South	STPs every 50' for 450' east of drainage	11	Native American (falls within previously delineated high probability zone)
STA. 174-175	North	STPs every 50' for 100' west of wetland across S.R. 26	3	Native American (falls along the edge of a previously delineated high probability zone)
STA. 174-176.5	South	STPs every 50' for 100' west and 150' east of wetland	7	Native American (falls along the edge of a previously delineated high probability zone. A known site is situated ~150' south of APE)
STA. 181-183 (Central Ave. Intersection)	South and along Central Ave.	mechanical stripping and monitoring near cemetery	N/A	Historic: Unmarked Graves Past roadwork (1963) may have truncated graves along roadside edge of Mariners Bethel Cemetery (see ***Figure C-10***)
STA. 206.5-207.5	South (proposed drainage basin)	STPs at 50' intervals in footprint of 100' x 130' drainage basin	12	Native American

Properties that may be subjected to total acquisition are not included in the above table.

Summary and Conclusions

A Phase IA Archaeological Assessment Survey was conducted for the S.R. 26 Improvements project. The purpose of the survey was to ascertain the archaeological sensitivity of the project APE. Although the project APE was concluded to fall within a high probability zone for containing Native American and historic archaeological sites, much of the project APE has been subjected to extensive past subsurface disturbance associated with roadway construction/maintenance and twentieth century commercial/residential development.

Using information obtained through documentary research and field inspection, several archaeological target areas have been identified within the project APE. These areas have been concluded to have potential for containing archaeological deposits and have been recommended for subsurface testing. Basic testing strategies for the target areas were also developed as part of this survey.